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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,918

06/25/2003

Michael See

134101

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09/29/2010

EXAMINER

HOSSAIN, TANIM M

ART UNIT

PAPER NUMBER

2445

NOTIFICATION DATE

DELIVERY MODE

09/29/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/603,918	SEE ET AL.	
	Examiner	Art Unit	
	Tanim Hossain	2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (U.S. 2002/0059407) in view of Herrmann (U.S. 2001/0032259), in further view of Motoyama (U.S. 2004/0049552).

As per claim 1, Davies teaches a method of managing one or more local resource properties, each having a value, by one or more managed network devices in a network comprising a network management system and a central data store, the method comprising the steps of: (a) monitoring the value of said one or more local resource properties (Abstract; paragraphs 0012, 0017); querying the local resource properties, determining a state, value, and quality of the local resource properties (paragraphs 0012-0014); generating a learning event report comprising the value of at least one of the one or more local resource properties (paragraphs 0019, 0054); and transmitting the learning event report to the central data store, wherein the value of at least one of the one or more local resource properties is recorded at the central data store and made available to the network management system for asynchronous processing (paragraphs 0055-0056, 0061, 0067); wherein the value of at least one of the one or

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more local resource properties is uploaded by the one or more managed network devices, via a local resource manager (paragraphs 0067, 0098).

While suggested by the discussion of asynchronous communications, Davies does not per se disclose that the local properties are uploaded via a local resource manager independent of the retrieval of the value by the network management system. Herrmann teaches that the local resource properties are uploaded via a local resource manager independent of the retrieval of the value by the network management system, as claimed (paragraphs 0035, 0039, 0047-0048). It would have been obvious to one of ordinary skill to explicitly include the uploading to a management system independently, as taught by Herrmann in the system of Davies. The motivation for doing so lies in the fact that independent, asynchronous communication allows for the system to perform other tasks without having to wait for responses to requests, which increases the efficiency of the networks. Davies suggests this concept, which therefore renders the specific inclusion of this concept through Herrmann obvious to one of ordinary skill. Both inventions are from the same field of endeavor, namely monitoring networks.

Davies-Herrmann does not specifically teach the assessment of priorities to the local resource properties and including a priority test of the event. Motoyama teaches the assessment of a priority of the local resource properties (Abstract; paragraphs 0012-0013), and generating a priority test of a learning event of the resource properties, where the uploading frequency of a learning event report is determined based on a priority of a learning event associated with the learning event report (0063, 0081, 0082, 0089). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to assess a priority of the properties, and generate a priority test of an event, where the uploading frequency of an event

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report is determined based on the priority of the event, as claimed, as taught by Motoyama in the system of Davies-Herrmann. The motivation for doing so lies in the fact that more urgent event occurrences would require immediate attention, which would therefore require a report uploading to be synchronized with the urgent event. This urgent event would thus govern the frequency of the event report, which would allow an administrator to attend to the event as quickly as possible, for example. All inventions are from the same field of endeavor, namely network monitoring.

As per claim 2, Davies-Herrmann-Motoyama teaches the method of claim 1, wherein the central data store is a directory server (Davies: Figure 5; paragraph 0054).

As per claim 3, Davies-Herrmann-Motoyama further teaches that the step of transmitting the learning event report to the central data store comprises the step of exchanging one or more Lightweight Directory Access Protocol messages (Davies: Figure 5; paragraph 0054).

As per claim 4, Davies-Herrmann-Motoyama further teaches that the one or more local resource properties comprise one or more internal resource properties (Davies: 0019).

As per claim 5, Davies-Herrmann-Motoyama further teaches that the one or more internal resource properties comprise one or more properties selected from the group consisting of: managed network device hardware configurations including network modules installed; managed network device software installations including the types of software, software version levels, and the date when such information was last updated; and managed network device identity information including device name, serial number of the chassis or primary management processor, location information, type of device, network interface module name, network interface module slot number, network interface module part number, network interface module

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hardware revision level, network interface module serial number, and network interface module date of manufacture (Davies: 0019, 0054).

As per claim 6, Davies-Hermann-Motoyama further teaches that the one or more local resource properties comprise one or more connectivity properties (Davies: 0019, 0054).

As per claim 7, Davies-Hermann-Motoyama further teaches that the one or more connectivity properties comprise properties selected from the group consisting of the OSI network model layer 2 and layer 3 addresses of an edge device, identification of the network interface module where the edge device is connected, speed of a port where the edge device is connected, one or more network protocols being used by the edge devices or systems, and an administrative and operational state of the link connecting to the edge device (Davies: 0019, 0054, 0098).

As per claim 8, Davies-Hermann-Motoyama further teaches that the step of monitoring comprises the steps of detecting one or more learning events and periodically polling for a current value of the one or more local resource properties (Davies: 0017).

As per claim 9, Davies-Hermann-Motoyama teaches periodically polling for a value, but does not specifically teach the use of specific 5 second to 5 minute intervals. Davies teaches the polling intervals are variable and configurable as needed (paragraphs 0068-0070). Official Notice is taken that it would have been obvious to one of ordinary skill in the art at the time of the invention to include the specific intervals at which to poll for information, as specific polling intervals constitute design choices and would have been obvious to one of ordinary skill in the art to include.

As per claim 10, Davies-Hermann-Motoyama further teaches that the learning event report consists essentially of a value of at least one of the one or more local resource properties different from the value of the at least one of the one or more local resource properties of a preceding learning event report (Herrmann: 0040, 0048).

As per claim 11, Davies-Hermann-Motoyama further teaches that the method further includes, after the step of detecting one or more learning events, assessing the priority of the learning event detected (Motoyama: Abstract).

As per claim 12, Davies-Hermann-Motoyama further teaches that the method further includes, after assessing the priority of the learning event detected, transmitting the learning event report to the central data store substantially immediately (Herrmann: 0040, 0048).

As per claim 13, Davies-Hermann-Motoyama further teaches that the method further includes, prior to monitoring value of one or more local resource properties, the step of acquiring the most recent value of each of the one or more local resource properties from an internal memory when the one or more managed network devices are initialized (Herrmann: 0040, 0048).

Claim 14 is rejected on the same bases as claim 1, as the instant claim discloses limitations similar to the earlier claim.

As per claim 15, Davies-Hermann-Motoyama further teaches that the central data store is a directory server enabled to exchange one or more Lightweight Directory Access Protocol (Davies: Figure 5; paragraph 0054).

Claims 16-19 are rejected under Davies-Hermann-Motoyama on the same bases as claims 4-7 respectively, as the instant claims disclose limitations similar to those of the earlier claims.

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As per claim 20, Davies-Hermann-Motoyama further teaches that the managed network device is a switching device further comprising: (a) a plurality of network interface modules (Davies: Abstract); (b) one or more packet processors for performing packet parsing and ingress packet processing necessary to perform switching routing (Davies: 0067); and (c) one or more memory devices for retaining one or more rules sets for switching and routing (Davies: 0054).

As per claim 21, Davies teaches an asynchronous network resource management system comprising: (a) at least one central data store (Davies: 0055-0056, 0061, 0067); (b) one or more local resource properties, each having a value (Davies: 0055-0056, 0061, 0067); (c) a plurality of managed network devices adapted to monitor the value of each of the one or more local resource properties, query the local resource properties, determine a state, the value, and quality of the local resource properties and assessing a priority of the local resource properties (Davies: 0055-0056, 0061, 0067); and transmit the value of each of the one or more local resource properties to the at least one central data store (Davies: 0055-0056, 0061, 0067); and (d) at least one network management system adapted to retrieve the value of each of the one or more local resource properties from the at least one central data store, wherein the value of at least one of the one or more local resource properties is uploaded by the one or more managed network devices, via a local resource manager (Davies: 0055-0056, 0061, 0067).

While suggested by the discussion of asynchronous communications, Davies does not per se disclose that the local properties are uploaded via a local resource manager independent of the retrieval of the value by the network management system. Herrmann teaches that the local resource properties are uploaded via a local resource manager independent of the retrieval of the value by the network management system, as claimed (paragraphs 0035, 0039, 0047-0048). It

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would have been obvious to one of ordinary skill to explicitly include the uploading to a management system independently, as taught by Herrmann in the system of Davies. The motivation for doing so lies in the fact that independent, asynchronous communication allows for the system to perform other tasks without having to wait for responses to requests, which increases the efficiency of the networks. Davies suggests this concept, which therefore renders the specific inclusion of this concept through Herrmann obvious to one of ordinary skill. Both inventions are from the same field of endeavor, namely monitoring networks.

Davies-Herrmann does not specifically teach the assessment of priorities to the local resource properties and including a priority test of the event. Motoyama teaches the assessment of a priority of the local resource properties (Abstract; paragraphs 0012-0013), and generating a priority test of a learning event of the resource properties, where the uploading frequency of a learning event report is determined based on a priority of a learning event associated with the learning event report (0063, 0081, 0082, 0089). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to assess a priority of the properties, and generate a priority test of an event, where the uploading frequency of an event report is determined based on the priority of the event, as claimed, as taught by Motoyama in the system of Davies-Herrmann. The motivation for doing so lies in the fact that more urgent event occurrences would require immediate attention, which would therefore require a report uploading to be synchronized with the urgent event. This urgent event would thus govern the frequency of the event report, which would allow an administrator to attend to the event as quickly as possible, for example. All inventions are from the same field of endeavor, namely network monitoring.

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Claims 22-25 are rejected under Davies-Hermann-Motoyama on the same bases as claims 4-7 respectively, as the instant claims disclose limitations similar to those of the earlier claims.

Response to Remarks

a. The finality of the previous rejection is proper, as it addresses each claim limitation.

b. Applicant asserts that Motoyama fails to disclose “assessing a priority of the local resource properties”, “generating a learning event report comprising the value and a priority test of the learning event of at least one of the one or more local resource properties, wherein a frequency of uploading the learning event report is determined based on a priority of a learning event associated with the learning event report.” Examiner respectfully disagrees.

Assessment of a priority of the local resource properties is discussed in paragraph 0013, for example. It is disclosed that “when it is determined that urgent service is needed by a network resource, the network resource may send a status message directly to the resource manager.” This determination of the need for urgent service constitutes the assessment of a priority, as claimed.

This also constitutes the generation of a learning event report comprising the value and a priority test of the learning event of at least one of the local resource properties. Paragraph 0089 further teaches this limitation. The learning event report is constituted by the notification that is sent. The value may be constituted by the sent temperature value, for example. The priority test determines whether that temperature value requires urgent attention, and should thus be sent at a higher priority, for example. Further, in paragraph 0089, the event report sent through the

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connection mode would comprise a value (what is being reported, for example) and priority test (the inherent reason it is being sent in that manner, for example).

The frequency of uploading is indeed determined based on a priority of the event, as claimed. In the cited paragraphs, it is disclosed that the reports are sent periodically, but during urgent situations, the reports are sent immediately. For example, during normal operation, temperature reports may be sent weekly. However, in the event of temperature emergencies, reports are sent immediately. This would then change the frequency of the reports being sent, such that reports are now sent more often than weekly. This then constitutes the claimed limitation of the uploading frequency being determined by the priority of the event.

As such, the cited references fully teach the claimed limitations.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is (571)272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571/272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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